Amendments to the Claims

Claim 1 has been canceled without prejudice.

2. (Currently amended) The method of Claim 31 ~~1~~, wherein the bone marrow stromal cells are obtained from bone marrow from a vertebrate.

3. (Currently amended) The method of Claim 31 ~~1~~, wherein the bone marrow stromal cells are obtained from bones removed from a vertebrate.

4. (Currently amended) The method of Claim 31 ~~1~~, wherein the bone marrow stromal cells are mammalian.

5. (Original) The method of Claim 4, wherein the bone marrow stromal cells are human.

6. (Original) The method of Claim 4, wherein the bone marrow stromal cells are canine.

7. (Currently amended) The method of Claim 31 ~~1~~, wherein the exogenous gene encodes a secreted peptide.

8. (Original) The method of Claim 7, wherein the secreted peptide is a serum protein, a blood clotting factor, a cytokine, a lymphokine, a growth factor, a peptide hormone, a lipid binding protein, a metabolic enzyme, an antibacterial peptide, an antimicrobial peptide, an antifungal peptide, or a neurotransmitter.

9. (Original) The method of Claim 8, wherein the blood clotting factor is factor VIII or factor IX.

10. (Currently amended) The method of Claim 31 ~~1~~, wherein the exogenous gene encodes a cell surface molecule.

11. (Original) The method of Claim 10, wherein the cell surface molecule is V-CAM-1, I-CAM-1, N-CAM, or V-LAM.

21. (Previously amended) Thawed BMSCs which have been transfected with an exogenous gene and cryopreserved, the level of expression of the exogenous gene of the thawed BMSCs being at least about 77% of the level of expression of said exogenous gene in the transfected BMSCs prior to cryopreservation.

22. (Previously presented) The BMSCs of Claim 21, wherein said BMSCs are human cells.

23. (Previously presented) The BMSCs of Claim 21, wherein said BMSCs are canine cells.

24. (Previously presented) The BMSCs of Claim 21, wherein said exogenous gene encodes a secreted peptide.

25. (Previously presented) The BMSCs of Claim 24, wherein the secreted peptide is a serum protein, a blood-clotting factor, a cytokine, a lymphokine, a growth factor, a peptide hormone, a lipid-binding protein, a metabolic enzyme, an

antibacterial peptide, an antimicrobial peptide, an antifungal peptide, or a neurotransmitter.

26. (Previously presented) The BMSCs of Claim 25, wherein the blood-clotting factor is Factor VIII or Factor IX.

27. (Previously presented) The BMSCs of Claim 21, wherein the exogenous gene encodes a cell surface molecule.

28. (Previously presented) The BMSCs of Claim 27, wherein the cell surface molecule is V-CAM-1, I-CAM-1, N-CAM, or V-LAM.

Claim 29 has been canceled without prejudice.

30. (Previously presented) The method of Claim 31 ~~29~~, including thawing the cryopreserved transfected BMSCs.

31. (Previously presented) A method for preserving cells comprising:

(a) providing bone marrow stromal cells (BMSCs) which have been transfected with an exogenous gene (transfected BMSCs), the level of expression of the exogenous gene of the transfected BMSCs having a predetermined value;

(b) washing said transfected BMSCs;

(c) detaching said transfected BMSCs from a tissue culture dish;

(d) suspending said transfected BMSCs in cryopreservation medium comprising: about 10% dimethyl sulfoxide, about 1-50% fetal bovine serum, and about 89-40% Dulbecco's modified Eagles' medium;

(e) storing the transfected BMSCs at about -80°C ;

wherein said transfected BMSCs in the thawed state have a level of expression of the exogenous gene which is at least about 77% of said predetermined value.

32. (New) The method of claim 31 wherein said cryopreservation medium comprises about 12.5-50% fetal bovine serum and about 77.5-40% Dulbecco's modified Eagles' medium.

33. (New) The method of claim 32 wherein said cryopreservation medium comprises about 16% fetal bovine serum and about 74% Dulbecco's modified Eagles' medium.

34. (New) Thawed BMSCs which have been transfected with an exogenous gene and cryopreserved using a method according to Claim 31.